ABSTRACT OF THE DISCLOSURE

A clothes dryer is provided with a fire detection and suppression system which releases a fire suppressing substance into the dryer chamber upon detection of a fire condition. The fire detection and suppression system includes, a controller, at least one temperature detector which is in communication with the controller and sends a signal to the controller when a temperature set point has been reached and/or exceeded, a source of fire suppressing substance (preferably water) which is delivered to the chamber over a pathway; and a valve in the pathway controlled by the controller. The controller opens the valve when a fire condition is detected, and closes the valve after a time sufficient to introduce a predetermined volume of the fire suppressing substance has passed. The dryer can include a flow detector, such as a pressure sensor or flow rate sensor, which will send information to the controller to enable the controller to determine how long the water valve needs to remain opened to deliver the predetermined amount of fire suppressing substance to the chamber.